of a chert weathered from a dolomite generally called Copper Ridge dolomite. Near the habitat of the *Opeas gracile* on its eastern contact it is faulted up. This dolomite is unsuitable as a furnace flux.

This note is intended as an addition to the abstract of a paper read by the junior author at the meeting of the Alabama Academy of Science in April, 1938, and published in the Proceedings, Vol. 10, part 1, p. 4. In this paper *Polygyra hopetonensis* (Shutt.) is for the first time reported from Alabama having been discovered in various cultural areas in the city of Birmingham.

VALVATA PISCINALIS (MÜLLER) IN THE GREAT LAKES

BY JOHN OUGHTON

This snail, a native of Europe, was first discovered in the Great Lakes by Mr. F. C. Baker (and recorded as *V. obtusa* in Trans. Acad. Sci., St. Louis, vol. 8: p. 94, 1898). It was next noticed by Chief Justice F. R. Latchford in Lake Ontario at Toronto (Nautlus, vol. 28: p. 10, 1914). Since that time, no mention has been made of it.

On first acquaintance, this species might perhaps be called an odd *Valvata sincera* or *Amnicola*. However, it is readily distinguished from our local species when its length (5 mm.), 4 obese whorls, squat spire, narrow deep umbilicus, fine regular radial striae and shining surface are all considered.

The purpose of these notes is to show its present range in the Great Lakes and to include a few notes on abundance, habitat and variation.

The author owes his thanks to the conchologists mentioned below who kindly contributed information. Further, he is obliged to Mr. G. E. Fairbairn, Mr. H. Sprague Troyer and Professor J. R. Dymond for assistance.

Sources of published information follow:

- 1. Museum of Natural History, University of Illinois, Urbana, Illinois, Mr. F. C. Baker: 1 record.
- 2. Private collection: Mr. C. L. Blakeslee, Buffalo, N. Y., five records.

- 3. Private collection: Hon. Chief Justice F. R. Latchford, Toronto, Ontario, 1 record.
- 4. Royal Ontario Museum of Zoology, Toronto, Ontario, 10 records.

Only the specimens contained in the Latchford and the Royal Ontario Museum of Zoology collections have been seen by the writer.

In the following collections there are no additional records for the Great Lakes:

- 5. Academy of Natural Sciences, Philadelphia, Penn. This collection was inspected by the writer through the courtesy of the Curator, Dr. H. A. Pilsbry.
- 6. Buffalo Museum of Science, Buffalo, New York: Mrs. Imogene C. Robertson.
- National Museum of Canada, Ottawa: Mr. Aurèle La Rocque.
- 8. University Museums, University of Michigan, Ann Arbor, Mich. Mr. Calvin Goodrich and Dr. H. Vander Schalie.

A small suite of the Toronto shells was submitted to Dr. Elmer Berry, of the University of Michigan, for examination. He declared it to be a characteristic lot of *V. piscinalis*.

In all instances, the records are based upon dead shells. Quite a few are in fresh condition, however, and retain the operculum.

LAKE ONTARIO

- 1. Charlotte, Rochester, Monroe Co., N. Y. No. 37842 Univ. of Illinois: 5 specimens, Mr. F. C. Baker.
- 2. Grand View Beach (15 miles west of Genesee River), N. Y. "A few specimens" Sept., 1936, Mr. C. L. Blakeslee.
- 1. Niagara-on-the-lake, Lincoln Co., Ont. (a) "Not as abundant as at Port Weller," Nov., 1935, Mr. C. L. Blakeslee. (b) Sept. 2, 1936, 10 shells, Royal Ontario Museum of Zoology.
- 2. Port Weller, Lincoln Co., Ont. "Abundant," June and Nov., 1935, Mr. C. L. Blakeslee. (Note: The Lake Ontario end of the Welland Canal is at Port Weller.)
- 3. Port Dalhousie, Lincoln Co., Ont. (a) June, 1936, Mr. C. L. Blakeslee. (b) Aug. 22, 1936, 6 shells, Royal Ontario Museum of Zoology.
- 4. Long Branch, York Co., Ont. April 7, 1936, 6 shells, Royal Ontario Museum of Zoology.

5. Near mouth of Humber River (Sunnyside Beach), Toronto, York Co., Ont. Inside the breakwater. 15-20 shells. Justice F. R. Latchford. A sample of this lot was identified by the late Dr. Bryant Walker. (b) 11 lots, totalling about 1500 shells: Collected between April 25, 1931, and Dec. 19, 1937, Royal Ontario Museum of Zoology.

6. Toronto Island, Toronto, York Co., Ont. (a) Exposed lake shore. May 22, 1937, Royal Ontario Museum of Zoology, 22 shells. (b) Toronto Bay. Oct. 4, 1936 and May 22, 1937. 108 shells, 2 lots, Royal Ontario Museum of Zoology.

7. Oshawa, Ontario Co., Ont. Aug. 26, 1936: 2 shells, Royal Ontario Museum of Zoology.

8. Cobourg, Northumberland Co., Ont. Oct. 11, 1936, 4 shells, Royal Ontario Museum of Zoology.

Port Hope, Durham Co., Ont. April 13, 1934, 1 shell, Royal

Ontario Museum of Zoology.

10. Bay of Quinte, Belleville, Hastings Co., Ont. June 20, 1936, 1 shell, Royal Ontario Museum of Zoology.

LAKE ERIE

Presque Isle, Erie, Pa., July, 1936, "One empty specimen found in a brief visit . . . '': Mr. C. L. Blakeslee.

No other records are known for Lake Erie, in spite of the fact that it has been fairly well collected, within the last few years, by conchologists on both north and south shores.

There are no records at hand from the remaining parts of the Great Lakes system and the Ottawa River and upper St. Lawrence River, although all these waters, with the exception of Lake Superior, have been moderately well explored conchologically in recent years.

(To be continued)

NOTES AND NEWS

EXACT DATES OF THE NAUTILUS.—Volume 51 (1): pp. 1-36, pls. 1-3, was mailed July 3, 1937; (2): 37-72, pls. 4-6, Oct. 22, 1937; (3): 73–108, pls. 7–8, Jan. 18, 1938; (4): 109–144 (+viii), pl. 9, April 21, 1938.—H.B.B.

Dr. Fred Baker died in San Diego on May 16, in his eightyfourth year. An account of his life and conchological work will appear in the next number.